PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	see Form PCT/ISA/220	see Form PCT/ISA/220							
RO5054PCT	ACTION	as well as, where applicable, item 5 below.	as, where applicable, item 5 below.							
International application No.	International filing date (day/mont	h/year) (Earliest) Priority Date (day/month/year	r)							
PCT/JP2005/011487	/011487 16/06/2005 17/06/2004									
Applicant			i							
RICOH COMAPNY, LTD.										
This International Search Report has bee according to Article 18. A copy is being tr		rching Authority and is transmitted to the applicant								
This International Search Report consists of a total of sheets. X It is also accompanied by a copy of each prior art document cited in this report.										
Basis of the report		· · · · · · · · · · · · · · · · · · ·	· 							
With regard to the language, the international search was carried out on the basis of the international application in the language in which it was filed, unless otherwise indicated under this item.										
The international this Authority (Ru		of a translation of the international application furnis	shed to							
b. With regard to any nucle	eotide and/or amino acid sequence	e disclosed in the international application, see Box N	No. 1.							
2. Certain claims were for	und unsearchable (See Box II).									
3. Unity of invention is lac	cking (see Box III).									
4. With regard to the title,		•								
X the text is approved as s	ubmitted by the applicant.									
the text has been established by this Authority to read as follows:										
5. With regard to the abstract,										
	ubmitted by the applicant.									
the text has been establi	shed, according to Rule 38.2(b), by	this Authority as it appears in Box No. IV. The applic								
may, within one month fr	om the date of mailing of this interna	tional search report, submit comments to this Autho	rity.							
6. With regard to the drawings,										
a. the figure of the drawings to be	published with the abstract is Figure	No. <u>20b</u>								
as suggested by	the applicant.									
	nis Authority, because the applicant									
	nis Authority, because this figure bet	ter characterizes the invention.								
b none of the figures is to	be published with the abstract.									

INTERNATIONAL SEARCH REPORT

International Application No PCT/JP2005/011487

A. CLASSIFICATION OF SUBJECT MATTER G11B20/12 G11B G11B7/007 G11B19/12 G11B27/32 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) G11B Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, PAJ C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Category ° Relevant to claim No. P,X EP 1 492 117 A (SONY CORPORATION) 1,4,12, 17,37,38 29 December 2004 (2004-12-29) abstract paragraphs '0001! - '0017! paragraphs '0030! - '0113! figures 3-9 X WO 03/105141 A (LG ELECTRONICS INC; SUH, 1,4,12, SANG WOON) 18 December 2003 (2003-12-18) 17,37,38 the whole document EP 0 715 301 A (SONY CORPORATION) A 1,4,12, 17,37,38 5 June 1996 (1996-06-05) abstract column 8, line 50 - column 9, line 1 figure 13 Further documents are listed in the continuation of box C. Patent family members are listed in annex. Special categories of cited documents: *T* later document published after the international filing date or priority date and not in conflict with the application but cited to understand the principle or theory underlying the "A" document defining the general state of the art which is not considered to be of particular relevance "E" earlier document but published on or after the international "X" document of particular relevance; the claimed invention cannot be considered novel or cannot be considered to filing date 'L' document which may throw doubts on priority claim(s) or which is cited to establish the publication date of another involve an inventive step when the document is taken alone "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the document is combined with one or more other such docudocument referring to an oral disclosure, use, exhibition or ments, such combination being obvious to a person skilled in the art. *P* document published prior to the international filing date but later than the priority date claimed "&" document member of the same patent family Date of the actual completion of the international search Date of mailing of the international search report 10 August 2005 16/12/2005 Name and mailing address of the ISA Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Sucher, R Fax: (+31-70) 340-3016

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INTERNATIONAL SEARCH REPORT

International Application No
PCT/JP2005/011487

C (Continue	ation) DOCUMENTS CONSIDERED TO BE RELEVANT	
Category °	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
Α	US 5 966 721 A (HIRAYAMA ET AL) 12 October 1999 (1999-10-12) abstract	1,4,12, 17,37,38
	column 1, lines 5-48 column 3, line 29 - column 4, line 3 figures 2-4	·
		·
	·	

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INTERNATIONAL SEARCH REPORT

Information on patent family members

International Application No
PCT/JP2005/011487

				1			
Patent document cited in search report	Pu	blication date		Patent family member(s)		Publication date	
EP 1492117	A 29	-12-2004	JP	2005018919		20-01-2005	
			CN	1577579		09-02-2005	
			ΕP	1492117		29-12-2004	
			US	2005025015	_A1	03-02-2005	
WO 03105141	A 18	3-12-2003	KR	2003094855	Α	18-12-2003	
			AU	2003241201	A1	22-12-2003	
			CN	1552064	Α	01-12-2004	
			ĒΡ	1512144	- A1	09-03-2005	
			WO	03105141	A1	18-12-2003	
			<u>us</u>	2005036427	_A1	17-02-2005	
EP 0715301	A 05	5-06-1996	AT	189076	T	15-02-2000	
			ΑU	3914895	A	06-06-1996	
		•	BR	9505603	8 A	04-11-1997	
			CA	2164081	. A1	31-05-1996	
			CN	1135632		13-11-1996	
			DE	69514630		24-02-2000	
			DE	69514630		31-05-2000	
			EP	0715301		05-06-1996	
			ES	2140628		01-03-2000	
			JP	8212561		20-08-1996	
			_US	6424614	B1	23-07-2002	
US 5966721	A 12	2-10-1999	JP	2871534		17-03-1999	
			JP	9007308		10-01-1997	
			CN	1280367		17-01-2001	
			CN	1334561		06-02-2002	
			CN	1146586		02-04-1997	
			CN	1229233		22-09-1999	
			DE	19625396		09-01-1997	
			KR	233201		01-12-1999	
			US	6076135		13-06-2000	
			US	6154806		28-11-2000	
			US	6233649		15-05-2001	
			US	633217		18-12-2001	
			US US	6347353 6324618		12-02-2002 27-11-2001	